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SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Art Unit: 659 Phone Nu Mail Box and Bldg/Room Location:	E. 1 (557) imber 30 5 (357)	Examiner #: Dat Serial Number:	832
Mail Box and Bldg/Room Location:	Resul	Its Format Preferred (circle): PA	PER DISK E-MAIL
If more than one search is submit	ted, please prioritize	e searches in order of need.	*****
Please provide a detailed statement of the so Include the elected species or structures, ke utility of the invention. Define any terms the known. Please attach a copy of the cover sh	earch topic, and describe a ywords, synonyms, acrony nat may have a special mea eet, pertinent claims, and	s specifically as possible the subject nowns, and registry numbers, and combining. Give examples or relevant cital abstract.	natter to be searched. ne with the concept or tions, authors, etc, if
Title of Invention:	parable Targetes	And region the Druge Ad	Their Theapeuticises
Inventors (please provide full names):	3 Til lopria	net Catorians	
Earliest Priority Filing Date:	7-200(_
For Sequence Searches Only Please include appropriate serial number.			numbers) along with the
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Date Searcher Picked Up: 12/6/10)	Bibliographic	Dr.Link	
Date Completed: 12/12/19	Litigation	Lexis/Nexis	
Searcher Prep & Review Time:	Fulltext	Sequence Systems	
Clerical Prep Time:	Patent Family	www/Internet	<u>.</u>
Online Time:	Other	Other (specify)	
PTO-1590 (8-01)			

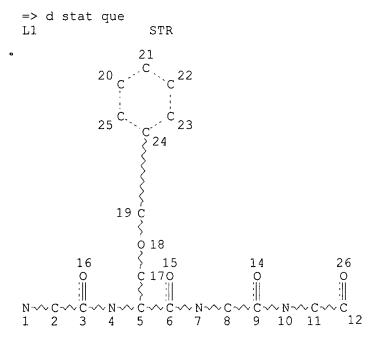
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NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 25

STEREO ATTRIBUTES: NONE

L3 4179 SEA FILE=REGISTRY SSS FUL L1

L41114 SEA FILE=HCAPLUS ABB=ON PLU=ON L3

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L5
             474 SEA FILE=REGISTRY ABB=ON PLU=ON MMP?
            1316 SEA FILE=REGISTRY ABB=ON PLU=ON METALLOPROTE?
159 SEA FILE=REGISTRY ABB=ON PLU=ON STROMELYSIN/BI
149 SEA FILE=REGISTRY ABB=ON PLU=ON GELATINASE/BI
L6
L7
L8
         179969 SEA FILE-HCAPLUS ABB-ON PLU-ON L5 OR MMP
31893 SEA FILE-HCAPLUS ABB-ON PLU-ON L6 OR METALLOPROTE?
59 SEA FILE-HCAPLUS ABB-ON PLU-ON MATRIXIN
2634 SEA FILE-HCAPLUS ABB-ON PLU-ON L7 OR STROMELYSIN
6230 SEA FILE-HCAPLUS ABB-ON PLU-ON L8 OR GELATINASE
L9
L10
L11
L12
L13
                6 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 AND (L9 OR L10 OR L11 OR
L14
                  L12 OR L13)
              29 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 (L) (CONJUGAT? OR LINK?)
L16
              34 SEA FILE=HCAPLUS ABB=ON PLU=ON L16 OR L14
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L17 ANSWER 1 OF 34 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                            2002:889545 HCAPLUS
TITLE:
                            Method of treating cancer using conjugate of
                            oligopeptide that is selectively cleaved by PSA and a
                            cytotoxic agent in combination with radiation therapy
                            Yao, Sui-long; Jones, Raymond E.; Defeo-Jones,
INVENTOR(S):
                            Deborah; Heimbrook, David C.; Rhymer, Patricia;
                            Wasserbly, Pamela J.
PATENT ASSIGNEE(S):
                            USA
SOURCE:
                            U.S. Pat. Appl. Publ., 67 pp.
                            CODEN: USXXCO
DOCUMENT TYPE:
                            Patent
LANGUAGE:
                            English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                   KIND DATE
                                                APPLICATION NO. DATE
                        ____
                               _____
                                                ______
     US 2002173451 A1
                               20021121
                                              US 2001-969244
                                                                   20011002
                                            US 2000-242815P P 20001024
PRIORITY APPLN. INFO.:
     The present invention relates to a method of treating cancer, and more
     particularly cancer associated with cells that produce and secrete prostate
     specific antigen (PSA), which is comprised of administering to a patient
     in need of such treatment a therapeutically effective amount of at least one
     conjugate (hereinafter referred to as a PSA conjugate), which comprises an
     oligopeptide that is selectively cleaved by PSA and a cytotoxic agent, in
     combination with radiation therapy. The preparation of conjugates of
     doxorubicin and vinblastine is presented.
     INDEXING IN PROGRESS
ΙT
     408502-26-1DP, resin-bound 475631-16-4DP, resin-bound
TΨ
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
      (Reactant or reagent)
         (method of treating cancer using conjugate of oligopeptide
         that is selectively cleaved by PSA and a cytotoxic agent in combination
         with radiation therapy)
L17 ANSWER 2 OF 34 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                            2002:276519 HCAPLUS
DOCUMENT NUMBER:
                            136:310188
```

Treatment of cancer with a prostate specific antigen

(PSA) conjugate and an NSAID compound

Heimbrook, David C.; Yao, Siu-long

U.S. Pat. Appl. Publ., 129 pp.

USA

Patent

CODEN: USXXCO

TITLE:

SOURCE:

INVENTOR(S):

DOCUMENT TYPE:

PATENT ASSIGNEE(S):

English LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE PATENT NO. -----_____ _---US 2001-896245 20010629 US 2002042375 A1 20020411 US 2000-216217P P 20000705 PRIORITY APPLN. INFO.: MARPAT 136:310188 OTHER SOURCE(S):

The invention relates to methods of treating cancer using a combination of a compound which is a PSA conjugate and a nonsteroidal antiinflammatory agent (NSAID) and to methods of preparing such compns. The PSA conjugate comprises an oligopeptide that is selectively cleaved by PSA and a cytotoxic agent. An example of a PSA conjugate is N-Ac-(4-trans-L-Hyp)-Ala-Ser-Chq-Gln-Ser-Leu-Dox (Dox = doxorubicin, Hyp = hydroxyproline, Chg = cyclohexylglycine) and COX-2 inhibitor 3-phenyl-4-[4-(4methylsulfonyl)phenyl]-2(5H)furanone is an example of an NSAID compound (syntheses given).

ΙT 408502-26-1DP, resin-bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(treatment of cancer with prostate specific antigen (PSA) conjugate and NSAID compound)

L17 ANSWER 3 OF 34 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:276430 HCAPLUS

136:310187 DOCUMENT NUMBER:

Treatment of cancer with a prostate specific antigen TITLE:

(PSA) conjugate and an inhibitor of angiogenesis

Defeo-Jones, Deborah; Heimbrook, David C.; Jones, INVENTOR(S):

Raymond E.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 102 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. DATE KIND DATE PATENT NO. _____ ___ _____ US 2002041880 A1 20020411 US 2001-896251 20010629 US 2000-215934P P 20000705 PRIORITY APPLN. INFO.:

MARPAT 136:310187 OTHER SOURCE(S):

The invention relates to methods of treating cancer using a combination of a compound which is a PSA conjugate and a compound which is an inhibitor of angiogenesis and to methods of preparing such compns. The PSA conjugate comprises an oligopeptide that is selectively cleaved by PSA and a cytotoxic agents. An example of a PSA conjugate is N-Ac-(4-trans-L-Hyp)-Ala-Ser-Chg-Gln-Ser-Leu-Dox (Dox = doxorubicin, Hyp = hydroxyproline, Chg = cyclohexylglycine) and 3-(3-thienyl)-6-(4-methoxyphenyl)pyrazolo[1,5alpyrimidine is an example of an angiogenesis inhibitor (syntheses given).

408502-26-1DP, resin-bound ፐጥ

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(treatment of cancer with a prostate specific antigen (PSA) conjugate and an inhibitor of angiogenesis)

L17 ANSWER 4 OF 34 HCAPLUS COPYRIGHT 2002 ACS 2001:693138 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

135:273218

TITLE:

Preparation of peptidase-cleavable, targeted antineoplastic drugs and their therapeutic use

Copeland, Robert A.; Albright, Charles F.; Combs, INVENTOR(S): Andrew P.; Dowling, Radine L.; Graciani, Nilsa R.; Han, Wei; Higley, C. Anne; Huang, Pearl S.; Yue, Eddy W.; Dimeo, Susan V. Dupont Pharmaceuticals Company, USA PATENT ASSIGNEE(S): PCT Int. Appl., 203 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: APPLICATION NO. DATE KIND DATE PATENT NO. ---------WO 2001068145 A2 20010920 WO 2001068145 A3 20020711 20010920 WO 2001-US8589 20010315 W: AT, AU, BR, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, HU, IN, JP, KR, LT, LU, LV, MX, NZ, PL, PT, RO, RU, SE, SG, SI, SK, UA, VN, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR US 2001-808832 20010315 US 2002103133 20020801 A1 EP 2001-918798 20010315 20021211 EP 1263473 A2 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, CY, TR US 2000-189387P P 20000315 PRIORITY APPLN. INFO.: WO 2001-US8589 W 20010315 OTHER SOURCE(S): MARPAT 135:273218 This invention is directed to antineoplastic agents conjugated to enzyme-cleavable peptides comprising the amino acid recognition sequence of a membrane-bound and/or cell-secreted peptidase. The conjugated compds. are for use as chemotherapeutic agents in the targeted treatment of cancers. Claimed peptide sequences include Cap-Paa-Xa2-Gly-Xp1-Laa, where Cap is an N-terminus group R, Xa4 or R-Xa4 (R is an amino capping group, Xa4 is an amino acid), Paa is Pro, 4-hydroxyproline (Hyp), 2-carboxyazetidine (Aze), homo-Pro, cyclohexylglycine (Chg), 4-fluorophenylalanine (Fph), nipecotic acid (Npa), 4thiazolidinecarboxylic acid (Tzc), or proline mimetic; Xa2 is an amino acid; Xpl is is an amino acid wherein -Gly-Xpl- or -Sar-Xpl form a bond cleavable by a matrixin; Laa is an amino acid, e.g., Leu, Ile, Nle, β -homo-Leu, homoleucine, homoserine, Ala and cyclohexylalanine. Thus, peptide conjugate Ac-PLGLYL-Dox (Dox = doxorubicin) was prepared by the solid phase method and evaluated for stability in blood and cleavage with MMPs and neprilysin. 360780-56-9P 360781-10-8P 360781-12-0P 360781-19-7P 360781-20-0P 360781-25-5P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of antineoplastic agents conjugated to enzyme-cleavable peptides) 146480-35-5, Gelatinase A 146480-36-6, IΤ Gelatinase B 161384-17-4 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (preparation of antineoplastic agents conjugated to enzyme-cleavable peptides) L17 ANSWER 5 OF 34 HCAPLUS COPYRIGHT 2002 ACS 2000:643798 HCAPLUS ACCESSION NUMBER: 133:350495 DOCUMENT NUMBER: Direct identification of a novel disulfide bond TITLE:

linkage system of new isolated isomer (isomer V) in

recombinantly produced h-IGF-I

AUTHOR(S): Iwai, Michio; Yokoyama, Hideyuki; Yamada, Hisashi;

Niwa, Mineo; Kobayashi, Masakazu

CORPORATE SOURCE: Marine Technical College, Faculty of Liberal Arts and

Science, Ashiya, 659-0026, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (2000), 48(9),

1304-1309

CODEN: CPBTAL: ISSN: 0009-2363
Pharmaceutical Society of Japan

DOCUMENT TYPE: Journal LANGUAGE: English

PUBLISHER:

AB Insulin-like growth factor I (IGF-I or somatomedin C) is a serum polypeptide with three intramol. disulfide bonds. In the course of synthesis by the recombinant DNA method, three disulfide bond isomers, all of which have Cys18-Cys61 with three combinations of two disulfide bonds formed by Cys6, Cys47, Cys48 and Cys52, were identified. Natural type, isomer II, was proved to have a Cys6-Cys48, Cys18-Cys61, Cys47-Cys52 disulfide bond system. Now, the fourth isomer, isomer V, which does not have Cys18-Cys61 disulfide, has been isolated, and its novel disulfide bond linkage system was identified by a chem. synthetic method. The supposed conformation constrained in 3D structure for isomer V would be discussed for its biol. activity.

IT 304011-41-4DP, resin-bound 304011-42-5DP, resin-bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthetic methods for the direct determination of the disulfide bond ${\bf linkages}$ in the newly isolated isomer V of the recombinantly

produced insulin-like growth factor-I)

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 6 OF 34 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2000:288387 HCAPLUS

DOCUMENT NUMBER: 133:17802

TITLE: Improved synthesis of difficult peptides using Boc

chemistry and a novel linker

AUTHOR(S): Kalbag, Suresh; Narindray, Daljit; Slavazza, Dario CORPORATE SOURCE: Departments of QC Biochemistry, Genentech, Inc., S.

San Francisco, CA, 94080, USA

SOURCE: Peptides 1998, Proceedings of the European Peptide Symposium, 25th, Budapest, Aug. 30-Sept. 4, 1998 (1999)

), Meeting Date 1998, 102-103. Editor(s): Bajusz, Sandor; Hudecz, Ferenc.

Akademiai Kiado: Budapest, Hung.

CODEN: 68WKAY Conference

DOCUMENT TYPE: Conference LANGUAGE: English

AB A symposium report. Solid state peptide synthesis was carried out using the linker 2-hydroxyethyl-dithio-propionylamino-MBHA.

IT 271794-97-9P 271794-98-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of difficult peptides using Boc chem. and novel

linker)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 7 OF 34 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:779214 HCAPLUS

DOCUMENT NUMBER: 132:26815

TITLE: Conjugates useful in the treatment of prostate cancer INVENTOR(S): Feng, Dong-Mei; Garsky, Victor M.; Jones, Raymond E.;

Wai, Jenny M.

PATENT ASSIGNEE(S): Merck and Co., Inc., USA

SOURCE: U.S., 59 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
US 5998362 A 19991207 US 1997-926412 19970909

AB Chem. conjugates which comprise oligopeptides, having amino acid sequences that are selectively proteolytically cleaved by free prostate specific antigen (PSA), hydrophilic oligopeptide blocking groups and known cytotoxic agents are disclosed. Such conjugates are useful in the treatment of prostatic cancer and benign prostatic hypertrophy (BPH).

IT 205186-90-9DP, PAM resin conjugates

RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(antitumor-peptide conjugates useful in the treatment of prostate cancer)

IT 205186-89-6D, PAM resin conjugates

RL: RCT (Reactant); RACT (Reactant or reagent)

(antitumor-peptide conjugates useful in the treatment of

prostate cancer)

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 8 OF 34 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:726856 HCAPLUS

DOCUMENT NUMBER: 132:122920

TITLE: The synthesis of arginine-containing peptides and

their conjugates with protohemin IX and

tetraphenylporphyrin

AUTHOR(S): Evstigneeva, R. P.; Zheltukhina, G. A.; Khalil, V.;

Efimova, E. I.

CORPORATE SOURCE: Lomonosov State Academy of Fine Chemical Technology,

Moscow, 117571, Russia

SOURCE: Bioorganicheskaya Khimiya (1999), 25(8), 572-580

CODEN: BIKHD7; ISSN: 0132-3423

PUBLISHER: MAIK Nauka
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB Arginine-containing peptides and their conjugates with protohemin were synthesized by the solid phase method using Merrifield resin. The conjugates of arginine containing peptides with tetraphenylporphyrin were obtained by using phosphorus trichloride as an activating agent.

IT 256391-34-1DP, resin-bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of arginine-containing peptides and their **conjugates** with protohemin and tetraphenylporphyrin)

IT 256398-75-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (synthesis of arginine-containing peptides and their conjugates with protohemin and tetraphenylporphyrin)

L17 ANSWER 9 OF 34 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:567008 HCAPLUS

DOCUMENT NUMBER: 131:322896

TITLE: A novel resin linker for solid-phase peptide synthesis

which can be cleaved using two sequential mild

reactions

AUTHOR(S): Zheng, Ailian; Shan, Daxian; Shi, Xuling; Wang, Binghe

CORPORATE SOURCE: Department of Chemistry, North Carolina State

University, Raleigh, NC, 27695-8204, USA

SOURCE: Journal of Organic Chemistry (1999), 64(20), 7459-7466

CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

GI

AB The interest in developing new linkers for solid-phase peptide and organic synthesis has increased tremendously as a result of the rapid development of combinatorial chem. Here, the development of a new redox-sensitive linker for solid-phase peptide synthesis is described. This linker can be readily cleaved under mild conditions by using two sequential mild reactions, a reduction followed by a base (Bu4N+F-)-catalyzed cyclic ether formation. Using the Merrifield resin-bound quinone linker I, peptides Boc-Trp-Ala-Gly-Gly-OH and Boc-Asn-Ala-Ser(CH2Ph)-Gly-Glu(OCH2Ph)-OH were synthesized. Because the cleavage does not use acidic conditions, this resin linker provides an alternative when acidic conditions are not desirable. Furthermore, the cleavage conditions do not affect most of the side chain protecting group. Therefore, the synthetic peptides can be used for the segment synthesis of larger peptides without the need to reprotect the side chain functional groups.

IT 249589-49-9P 249589-51-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(solid-phase peptide synthesis using a redox-sensitive, quinone-derived resin **linker** that can be cleaved under mild conditions)

IT 249589-42-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(solid-phase peptide synthesis using a redox-sensitive, quinone-derived resin **linker** that can be cleaved under mild conditions)

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 10 OF 34 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:487893 HCAPLUS

DOCUMENT NUMBER: 131:286798

TITLE: Synthesis of Two Possible Disulfide Bonds Containing

Peptide Fragments (Cys6-Cys47, Cys48-Cys52 (Type I), and Cys6-Cys48, Cys47-Cys52 (Type II) of h-IGF-I) for

the Identification of Disulfide Bond Linkage in

Recombinantly Produced h-IGF-I

AUTHOR(S): Iwai, Michio; Yamada, Hisashi; Ishii, Yoshinori;

Tamura, Kouichi; Niwa, Mineo; Kobayashi, Masakazu CORPORATE SOURCE: Dep. Chem., Fac. Liberal Arts and Sci., Marine

Technical College, Ashiya, Hyogo, 659-0026, Japan

SOURCE: Bulletin of the Chemical Society of Japan (1999),

72(8), 1827-1835

CODEN: BCSJA8; ISSN: 0009-2673

PUBLISHER: Chemical Society of Japan

DOCUMENT TYPE: Journal LANGUAGE: English

The primary structure of human IGF-I, except for the disulfide bond system, has been reported by Rinderknecht and Humbel. IGF-I afforded the corresponding characteristic peptide fragments on V8 protease digestion, which contained Cys6, Cys47, Cys48, and Cys52. Two possible fragments, Type I with Cys6-Cys47 and Cys48-Cys52 and Type II with Cys6-Cys48 and Cys47-Cys52 of h-IGF-I(4-9,47-53), were chem. synthesized. The disulfide bond system of IGF-I was unequivocally determined to be the Type-II form along with Cys18-Cys61. Interestingly, the Type-I system was included in the disulfide bond isomer produced as the main byproduct in the refolding step on IGF-I synthesis by the recombinant DNA method.

IT 246849-51-4P 246849-52-5P 246849-53-6P 246849-54-7P 246849-55-8P 246849-56-9P 246849-57-0P 246849-58-1P 246849-59-2P 246849-60-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of in the synthesis of two possible disulfide bonds for the identification of disulfide bond linkage in recombinantly produced h-IGF-I)

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 11 OF 34 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:425789 HCAPLUS

DOCUMENT NUMBER: 131:55803

TITLE: Synthetic peptide substrates for the determination of

human pepsinogen II or pepsin II for diagnosis of

stomach diseases

INVENTOR(S): Hayashi, Akio; Matsuo, Masayoshi
PATENT ASSIGNEE(S): Ono Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 9932511 A1 19990701 WO 1998-JP5780 19981221

W: JP, KR, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,

PT, SE

EP 1046650 A1 20001025 EP 1998-961451 19981221

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI US 6441131 B1 20020827 US 2000-581944 20000620

PRIORITY APPLN. INFO.: JP 1997-364796 A 19971222

JP 1998-213513 A 19980713

WO 1998-JP5780 W 19981221

OTHER SOURCE(S): MARPAT 131:55803

GΙ

$$R^{2}$$
 R^{2}
 $Q-N$
 H
 N
 $X_{m}-Z$
 Q
 R^{4}
 I

AB Provided are synthetic peptides I (Q=Qa(AA)n [AA=amino acid residues; n=0-15 integral; Qa=H, Cl-4 alkyl, amino group-protecting groups, D- or L-amino or NH2(CH2)rCO (r=2-7 integral)]; R1,R2=H, halo on aromatic ring; R3= H, halo; R4=H, Cl-3 alkyl or hydroxymethyl; X=D- or L-amino acid; m=0, 1; Z=aniline derivative, aminocumarine derivative, amino-naphthalene derivative; when

n=>2, AA may be same or different amino acids; $Rl \neq R2 \neq R3 = H$) for use as a substrate for the determination of human body fluid pepsinogen II or pepsin II during diagnosis of stomach diseases such as cancer or ulcer. Upon digestion of I with human pepsin II, II (R4, X, m, Z as in I) may be obtained and its aminopeptidase-digested product ZH may be determined Synthesis of Pro-Leu-Ser-Glu-Ala-(2-Naphthyl)Ala-p-aniline and other I, and determination of pepsin II in a blood anal. using I as a substrate were demonstrated.

IT 228103-11-5DP, conjugate with oxime resin

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthetic peptide substrates for determination of human pepsinogen II or pepsin II for diagnosis of stomach diseases)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 12 OF 34 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:166639 HCAPLUS

DOCUMENT NUMBER: 130:209984

TITLE: Synthesis of cyclosporin A conjugates for treatment of

neurological disorders

INVENTOR(S): Rich, Daniel H.; Solomon, Michael E. PATENT ASSIGNEE(S): Wisconsin Alumni Research Foundation, USA

SOURCE: PCT Int. Appl., 129 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 9910374 A1 19990304 WO 1998-US17544 19980825
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,

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DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
             UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                            19990316
                                           AU 1998-92038
                                                             19980825
     AU 9892038
                       A1
                                           US 1999-242724
     US 6316405
                       В1
                            20011113
                                                             19990222
                                        US 1997-57751P P 19970826
PRIORITY APPLN. INFO.:
                                        WO 1998-US17544 W 19980825
                         MARPAT 130:209984
OTHER SOURCE(S):
     Cyclosporin A (CsA) conjugates, cyclo(V-Abu-W-X-Val-X'-Y(Z)-D-Ala-MeLeu-MeLeu-MeVal) [V = MeLeu(3-OH), MeLeu, MeSer, MeSer-PG, MeThr, MeThr-PG,
     where PG is a side-chain protecting group; W \approx D-N-Me amino acid or
     N-methylglycyl residue; X, X' = N-methylleucinyl or N-methylalanyl
     residue; Y = lysyl, homo-lysyl, ornithinyl, lysyl-PG, homo-lysyl-PG, or
     ornithinyl-PG residue; Z is a polypeptide comprising 5 or more contiguous
     residues of A\beta peptide], were prepared for the treatment of neurol.
     disorders. Thus, the synthesis of Ac-EKLVFF-NH2/[MeLeu(3-OH)1,D-
     MeAla4,6,Lys7]CsA conjugate is described.
TT
     220871-27-2P 220871-28-3P 220871-29-4P
     220871-30-7P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (synthesis of cyclosporin A conjugates for treatment of
        neurol. disorders)
                                THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L17 ANSWER 13 OF 34 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
                         1999:90333 HCAPLUS
DOCUMENT NUMBER:
                         130:167157
                         Oligopeptides recognized and cleavable by free
TITLE:
                         prostate specific antigen for treating prostate cancer
                         Defeo-Jones, Deborah; Garsky, Victor M.; Feng,
INVENTOR(S):
                         Dong-Mei; Jones, Raymond E.; Oliff, Allen I.
PATENT ASSIGNEE(S):
                         Merck and Co., Inc., USA
                         U.S., 100 pp., Cont.-in-part of U.S. Ser. No. 468,161.
SOURCE:
                         CODEN: USXXAM
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                            APPLICATION NO. DATE
     PATENT NO.
                      KIND DATE
                                            ______
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                            -----
                            19990202
                                            US 1995-540412
                                                             19951006
     US 5866679
                       Α
                                            US 1994-267092
                                                             19940628
     US 5599686
                       Α
                            19970204
                                            US 1995-468161
                                                             19950606
                            20001107
     US 6143864
                       Α
                                            CA 1996-2233272 19961002
                            19970410
                       AA
     CA 2233272
                      Al
                            19970410
                                            WO 1996-US15713 19961002
     WO 9712624
         W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HU,
             IL, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX,
             NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, UZ, VN,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,
             MR, NE, SN, TD, TG
                       A1 19970428
                                          AU 1996-72034
                                                             19961002
     AU 9672034
                                           EP 1996-933210
                                                            19961002
                       A1 19980722
     EP 853483
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI

JP 1996-514360

19961002

T2

JP 10512588

19981202

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US 1998-51342
                            20001010
                                                            19980406
     US 6130204
                      A
                                           AU 1998-64763
                                                            19980506
                            19980723
     AU 9864763
                      A1
     AU 714288
                            19991223
                      B2
                                        US 1994-267092
                                                         A2 19940628
PRIORITY APPLN. INFO.:
                                        US 1995-404833
                                                         B2 19950315
                                                        A2 19950606
                                        US 1995-468161
                                        AU 1995-30922
                                                         A3 19950607
                                                       A 19951006
                                        US 1995-540412
                                                       A3 19961002
                                        AU 1996-72034
                                        WO 1996-US15713 W 19961002
OTHER SOURCE(S):
                         MARPAT 130:167157
     Oligopeptides which comprise amino acid sequences that are recognized and
     proteolytically cleaved by free prostate specific antigen (PSA) are
     described. Also described are assays which comprise such oligopeptides
     useful for determining free PSA protease activity in vitro and in vivo.
     Therapeutic agents which comprise conjugates of such oligopeptides and
     known therapeutic or cytotoxic agents are also described. The
     oligopeptide conjugates are useful for treatment of prostate cancer.
     189513-07-3D, resin-bound
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (oligopeptides recognized and cleavable by free prostate specific
        antigen protease and conjugates with cytotoxic agent for
        treating prostate cancer)
ΙŢ
     220306-52-5DP, resin-bound
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (oligopeptides recognized and cleavable by free prostate specific
        antigen protease and conjugates with cytotoxic agent for
        treating prostate cancer)
                               THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                         39
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L17 ANSWER 14 OF 34 HCAPLUS COPYRIGHT 2002 ACS
                         1998:812106 HCAPLUS
ACCESSION NUMBER:
                         130:153953
DOCUMENT NUMBER:
TITLE:
                         Synthesis of a Glycopeptide Containing
                         Oligosaccharides: Chemoenzymic Synthesis of Eel
                         Calcitonin Analogs Having Natural N-Linked
                         Oligosaccharides
                         Mizuno, Mamoru; Haneda, Katsuji; Iguchi, Reiko;
AUTHOR(S):
                         Muramoto, Ikuyo; Kawakami, Toru; Aimoto, Saburo;
                         Yamamoto, Kenji; Inazu, Toshiyuki
                         Noguchi Institute, Kaga Itabashi-ku Tokyo, 173-0003,
CORPORATE SOURCE:
                         Japan
                         Journal of the American Chemical Society (1999),
SOURCE:
                         121(2), 284-290
                         CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER:
                         American Chemical Society
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         English
OTHER SOURCE(S):
                         CASREACT 130:153953
     A novel chemoenzymic synthesis of eel calcitonin (eCT) glycopeptide
     analogs having natural N-linked oligosaccharides, such as a disialo
     biantennary complex-type [(NeuAc-Gal-GlcNAc-Man)2-Man-GlcNAc2], an asialo
     complex-type [(Gal-GlcNAc-Man)2-Man-GlcNAc2], and a high-mannose type
     [Man6-GlcNAc2] as model compds. for glycoprotein synthesis is described.
     First, a glycoprotein containing N-acetylglucosamine (GlcNAc) was prepared by a
     chem. synthesis. Next, natural oligosaccharides were added to the prepared
     glycopeptide containing GlcNAc by a transglycosylation reaction using
     endo-\beta-N-acetylglucosaminidase (endo-\beta-GlcNAc-ase) from Mucor
     hiemalis.
     201530-30-5DP, resin-bound
IT
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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(chemoenzymic preparation of eel calcitonin analogs having natural N-linked oligosaccharides)

REFERENCE COUNT: 35

THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 15 OF 34 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1998:597708 HCAPLUS

DOCUMENT NUMBER: 130:25299

TITLE: A new base-labile linker for Boc solid phase peptide

synthesis

AUTHOR(S): Eggenweiler, Hans-Michael; Clausen, Nils; Bayer, Ernst

CORPORATE SOURCE: Institute of Organic Chemistry, University of

Tubingen, Tubingen, 72076, Germany

SOURCE: Peptides 1996, Proceedings of the European Peptide

Symposium, 24th, Edinburgh, Sept. 8-13, 1996 (1998), Meeting Date 1996, 359-360. Editor(s): Ramage, Robert; Epton, Roger. Mayflower Scientific:

Kingswinford, UK.

CODEN: 66RCA5

DOCUMENT TYPE: Conference LANGUAGE: English

GI

AB Solid phase fragment condensation is an important method well established in Fmoc chem. for the synthesis of large peptides. However, it is rarely used in Boc chem. Linkers which allow cleavage of protected peptides in Boc/Bzl strategy include those based on the fluorene system, hydroxyethyl-nitrobenzoic acid as well as photolabile, fluoride cleavable and palladium(0) cleavable linkers. None of these is without drawbacks, e.g. laborious synthesis, side reactions during cleavage, poor cleavage yield or product contamination by catalyst. Here the authors report a new, simple linker, based on α -hydroxymethyl acrylic acid (I; R = H, Me, iso-Pr, Ph; Rl = H; P = polymer support), which allows ready access to fully protected peptides by the Boc/Bzl strategy. This linker is readily available and permits rapid, quant. cleavage under mild basic conditions, e.g. 5-10% piperidine or morpholine, the first amino acid being attached through an allylic ester linkage. In contrast to other allylic ester linkers, the α -hydroxymethyl acrylic acid based linker system exhibits extreme lability to primary and secondary amines or nucleophiles like F. However, no cleavage or addition products can be detected in 50% DIEA or NMM in DMF or 55% TFA in DCM after 24 h at 25°. According to the cleavage mechanism, the lability towards nucleophiles can be adjusted by varying the substituents at the double bond, to meet the requirements of different applications. In accord with these considerations, the authors found enhanced base stability for I (R =CH3,R1 \approx Boc-Phe; t1/2 = .apprx.15 min) compared to R = H (t1/2 \approx .apprx.3 min). The effect was more pronounced for R = i-Pr. I (R = Ph, R1 = H)showed almost complete piperidine stability. To demonstrate the application of the new linker principle, the authors used linker I (R = R1 = H), to synthesize several protected peptide fragments, e.g.

Boc-Cys(Acm)-Thr(Bzl)-Leu-Asn-Phe-OH, in Boc/Bzl strategy on aminomethylated polystyrene (1.33 mmol/g) and TentaGel S NH2 (0.27 mmol/g). Loading of the resins was performed either by coupling the preformed linker-amino acid building block onto the resin as its Pfp-Ester or by coupling the protected amino acid onto linker-functionalized resin. The second method allows flexibility regarding the substrate coupled onto the resin. The first method facilitates exact determination of substitution. Both HOBt/DIC- and TBTU-chemistries were used, with in-situ neutralization. Syntheses utilized an ABI 433A peptide synthesizer in 0.1 mmol scale. HOBt/DIC as well as TBTU activation gave crude products of high purity (Figure 2), TBTU activation allowing shorter coupling cycles. Cleavage was carried out with 5% piperidine or morpholine in varying solvents, depending on peptide solubility Crude products obtained by cleavage with morpholine were superior to those cleaved by piperidine. For HPLC, crude cleavage mixts. were injected directly after neutralization with acetic acid. The identity and integrity of the protected peptides was confirmed by IS-MS. The authors have demonstrated that the new α hydroxymethyl acrylic acid linker is a useful, practicable and versatile tool for synthesizing fully protected peptides for the Boc/Bzl strategy for fragment condensation. Its advantages, compared to linkers so far used for that purpose are (a) ready availability, (b) extremely mild cleavage conditions combined with (c) complete stability towards Boc-SPPS conditions. Alternatively, palladium(O) catalyzed cleavage is possible. The rapid cleavage process (t1/2 = .apprx.3 min) enables quasi simultaneous monitoring of the ongoing synthesis by HPLC. By varying the substituents at the double bond of the acrylic system, it is possible to create a whole class of linkers with finely adapted lability. As preliminary results showed, in case of ethers instead of esters, cleavage proceeds under similar conditions. This unusual ether lability is due to the described mechanism of cleavage.

216220-83-6P 216220-84-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (new base-labile α -(hydroxymethyl)acrylic acid **linker**

for Boc solid phase peptide synthesis)

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 16 OF 34 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1998:293399 HCAPLUS

DOCUMENT NUMBER: 129:4866

Peptide conjugates useful in the treatment of prostate TITLE:

cancer

INVENTOR(S): Garsky, Victor M.; Feng, Dong-Mei; Defeo-Jones,

Deborah

Merck & Co., Inc., USA; Garsky, Victor M.; Feng, PATENT ASSIGNEE(S):

Dong-Mei; Defeo-Jones, Deborah

PCT Int. Appl., 143 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	CENT	NO.		KI!	ND 	DATE			A	PPLI	CATI	N NC	o. 	DATE			
WO	9818	493		A	2	1998	0507		M	3 19	97 - U	S192	25	1997	1027		
	W:	AL,	AM,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CN,	CU,	CZ,	EE,	GE,	ΗU,
		ID,	IL,	IS,	JP,	KG,	KR,	KZ,	LC,	LK,	LR,	LT,	LV,	MD,	MG,	MK,	MN,
		MX,	NO,	NZ,	PL,	RO,	RU,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TR,	TT,	UA,	US,
		UZ,	VN,	YU,	AM,	AZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	ΤM				
	RW:	GH,	ΚE,	LS,	MW,	SD,	SZ,	ŪG,	ZW,	AT,	BE,	CH,	DE,	DK,	ES,	FΙ,	FR,
		GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,
		GN,	ML,	MR,	ΝE,	SN,	TD,	TG									

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US 1997-950805
    US 5948750
                           19990907
                                                           19971014
    AU 9851497
                                          AU 1998-51497
                                                           19971027
                      Α1
                           19980522
    AU 726434
                           20001109
                      В2
    EP 942754
                                          EP 1997-946296
                           19990922
                                                           19971027
                      A2
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,
            SI, LT, LV, FI, RO
    BR 9712589
                     Α
                           19991026
                                          BR 1997-12589
                                                           19971027
    CN 1242708
                           20000126
                                          CN 1997-181168
                                                           19971027
                     Α
    JP 2000509407
                     T2
                           20000725
                                          JP 1998-520593
                                                           19971027
                     A 19980430
                                          ZA 1997~9655
                                                           19971028
    ZA 9709655
                     В
                           20010311
                                          TW 1997-86115986 19971028
    TW 425286
    NO 9902069
                      A
                           19990630
                                          NO 1999-2069
                                                           19990429
    KR 2000052970
                   A 20000825
A1 20020822
                                          KR 1999-703846
                                                           19990430
    US 2002115596
                                          US 2001-961236
                                                           20010921
                                       US 1996-29224P P 19961030
PRIORITY APPLN. INFO.:
                                       GB 1996-26309
                                                        Α
                                                           19961218
                                                        P 19970404
                                       US 1997-42921P
                                                        A 19970828
                                       GB 1997-18160
                                       WO 1997-US19225 W 19971027
                                       US 2001-819394 Al 20010328
                        MARPAT 129:4866
OTHER SOURCE(S):
    Chem. conjugates which comprise oligopeptides, having amino acid sequences
     that are selectively proteolytically cleaved by free prostate specific
    antigen (PSA), and known cytotoxic agents are disclosed. Such conjugates
    are useful in the treatment of prostatic cancer and benign prostatic
    hypertrophy. Thus, [N-Ac-(4-trans-L-Hyp)]-Ala-Ser-Chg-Gln-Ser-Leu-Dox
     (L-Hyp = 4-hydroxy-L-proline, Chg = cyclohexylglycine, Dox = doxorubicin),
    prepared by the solid-phase method, was assayed for in vitro cytotoxicity
    (LNCaP cell kill in 72 h, EC 50 = 100 \muM).
    207395-87-7DP, resin-bound 207395-91-3DP, resin-bound
    RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (peptide conjugates useful in treatment of prostate cancer)
L17 ANSWER 17 OF 34 HCAPLUS COPYRIGHT 2002 ACS
                        1998:268967 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                        128:244313
                        Convergent Synthesis of N-Linked Glycopeptides on a
TITLE:
                        Solid Support
AUTHOR(S):
                        Roberge, J. Y.; Beebe, X.; Danishefsky, S. J.
                        Laboratory for Bioorganic Chemistry, Sloan-Kettering
CORPORATE SOURCE:
                        Institute for Cancer Research, New York, NY, 10021,
SOURCE:
                        Journal of the American Chemical Society (1998),
                        120(16), 3915-3927
                        CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER:
                        American Chemical Society
DOCUMENT TYPE:
                        Journal
LANGUAGE:
                        English
    Solid-supported synthesis can be conducted to produce a variety of
    glycopeptides in good overall yields. The carbohydrates are formed by the
    glycal assembly method. The polymer-bound construct terminates in a
    qlycal. The terminal double bond can be functionalized to provide a
    C2-N-acetylglucosamine linkage with an amino group in the anomeric
    position. The latter can be coupled, in a convergent manner, to the
    γ-carboxyl group of an aspartyl residue on a preformed peptide.
    Iodosulfonamidation of the polymer-bound glucal to the N-acetylglucosamine
    using anthracenesulfonamide was crucial for the success of the solid-phase
    synthesis. This general method was employed in the formation of a variety
    of glycopeptides.
IT
    167414-32-6P
    RL: SPN (Synthetic preparation); PREP (Preparation)
```

(convergent solid-phase synthesis of asparagine-linked

glycopeptides)

L17 ANSWER 18 OF 34 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1998:180735 HCAPLUS

DOCUMENT NUMBER: 128:252982

TITLE: Oligopeptide-cytotoxic agent conjugates useful in the

treatment of prostate cancer and benign prostatic

hypertrophy

Feng, Dong-Mei; Garsky, Victor M.; Jones, Raymond E.; INVENTOR(S):

Oliff, Allen I.; Wai, Jenny M.

Merck & Co., Inc., USA; Feng, Dong-Mei; Garsky, Victor
M.; Jones, Raymond E.; Oliff, Allen I.; Wai, Jenny M. PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 138 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                 KIND DATE
                                       APPLICATION NO. DATE
                          -----
                                       WO 1997-US16087 19970910
    WO 9810651 A1 19980319
        W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HU,
            ID, IL, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN,
            MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US,
            UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,
            GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
            GN, ML, MR, NE, SN, TD, TG
    AU 9744123
                          19980402
                                        AU 1997-44123
                                                         19970910
                     A1
                          20000203
    AU 715632
                     В2
    EP 926955
                         19990707
                                         EP 1997-942423
                                                        19970910
                     Α1
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
    JP 2001501601
                   Т2
                          20010206
                                        JP 1998-513857
                                                        19970910
                                         US 1999-254892
                                                         19990628
    US 6391305
                     В1
                          20020521
PRIORITY APPLN. INFO.:
                                      US 1996-26015P P 19960912
                                      GB 1996-24170
                                                      A 19961119
                                      WO 1997-US16087 W 19970910
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OTHER SOURCE(S): MARPAT 128:252982

Chem. conjugates are disclosed which comprise oligopeptides, having amino acid sequences that are selectively proteolytically cleaved by free prostate specific antigen (PSA), hydrophilic oligopeptide blocking groups, and known cytotoxic agents. Such conjugates are useful in the treatment of prostatic cancer and benign prostatic hypertrophy (BPH).

205186-89-6DP, resin-bound 205186-90-9DP, resin-bound ΙT RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction; oligopeptide-cytotoxic agent conjugates for treatment of prostate cancer and benign prostatic hypertrophy)

L17 ANSWER 19 OF 34 HCAPLUS COPYRIGHT 2002 ACS 1998:79057 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 128:241112

TITLE: Membrane type-1 matrix metalloprotease and

stromelysin-3 cleave more efficiently

synthetic substrates containing unusual amino acids in

their P1' positions

AUTHOR(S): Mucha, Artur; Cuniasse, Philippe; Kannan, Rama; Beau,

Fabrice; Yiotakis, Athanasios; Basset, Paul; Dive,

Vincent

CORPORATE SOURCE: CEA, Departement d'Ingenierie et d'Etudes des

Proteines, CE-Saclay, Gif/Yvette, 91191, Fr.

SOURCE: Journal of Biological Chemistry (1998), 273(5),

2763-2768

CODEN: JBCHA3; ISSN: 0021-9258

PUBLISHER: American Society for Biochemistry and Molecular

Biology

DOCUMENT TYPE: Journal LANGUAGE: English

The influence of the substrate P1' position on the specificity of two zinc matrix metalloproteases, membrane type-1 matrix metalloprotease (MT1-MMP) and stromelysin-3

(ST3), was evaluated by synthesizing a series of fluorogenic substrates of general formula dansyl-Pro-Leu-Ala-Xaa-Trp-Ala-Arg-NH2, where Xaa in the Pl' position represents unusual amino acids containing either long arylalkyl or alkyl side chains. Our data demonstrate that both MT1-MMP and ST3 cleave substrates containing in their P1' position unusual amino acids with extremely long side chains more efficiently than the corresponding substrates with natural phenylalanine or leucine amino acids. In this series of substrates, the replacement of leucine by S-para-methoxybenzyl cysteine increased the kcat/Km ratio by a factor of 37 for MT1-MMP and 9 for ST3. The substrate with a S-para-methoxybenzyl cysteine residue in the P1' position displayed a kcat/Km value of 1.59 106 M-1 S-1 and 1.67 104 M-1 S-1, when assayed with MTI-MMP and ST3, resp. This substrate is thus one of the most rapidly hydrolyzed substrates so far reported for matrixins, and is the first synthetic peptide efficiently cleaved by ST3. These unexpected results for these two matrixins suggest that extracellular proteins may be cleaved by matrixins at sites containing amino acids with unusual long side chains, like those generated in vivo by some post-translational modifications.

145267-01-2, Stromelysin-3 161384-17-4,

Membrane type-1 matrix metalloprotease

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(membrane type-1 matrix metalloprotease and

stromelysin-3 cleave more efficiently synthetic substrates

containing unusual amino acids in P1' positions)

204981-58-8 ΤT

> RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)

(membrane type-1 matrix metalloprotease and

stromelysin-3 cleave more efficiently synthetic substrates

containing unusual amino acids in P1' positions)

L17 ANSWER 20 OF 34 HCAPLUS COPYRIGHT 2002 ACS 1997:689560 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 127:346608

TITLE: Synthesis of asparagine-linked glycopeptides on a

polymeric solid support

INVENTOR(S): Danishefsky, Samuel J.; Roberge, Jacques; Beebe, Xenia PATENT ASSIGNEE(S): Sloan-Kettering Institute for Cancer Research, USA SOURCE: U.S., 68 pp., Cont.-in-part of U.S. Ser. No. 430,355.

CODEN: USXXAM

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5679769 US 5543505 US 5708163 WO 9640198	A A A	19971021 19960806 19980113	US 1995-477776 US 1994-213053 US 1995-430355 WO 1996-US10229	19950607 19940315 19950428 19960607
	JP, MX	20002245	WO 1770 0310227	1330001

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

AU 9661748 Al 19961230 AU 1996-61748 19960607 PRIORITY APPLN. INFO.: US 1994-213053 A2 19940315

> US 1995-430355 A2 19950428 US 1995-477776 A 19950607 WO 1996-US10229 W 19960607

> > Ι

OTHER SOURCE(S): MARPAT 127:346608

GΙ

AB The present invention provides a process for synthesizing a glycopeptide useful as a vaccine for inducing antibodies to human breast cancer cells (no data). Thus, solid phase synthesis of trisaccharide peptide I is reported.

IT 197503-02-9DP, polymer support

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of asparagine-linked glycopeptides on a polymeric solid support)

IT 167414-32-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of asparagine-linked glycopeptides on a polymeric solid support)

L17 ANSWER 21 OF 34 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1997:374825 HCAPLUS

DOCUMENT NUMBER: 126:343882

TITLE: Preparation of peptide conjugates useful in the

treatment of benign prostatic hyperplasia

INVENTOR(S): Defeo-Jones, Deborah; Jones, Raymond E.; Oliff, Allen

I.; Scolnick, Edward M.; Garsky, Victor M.

PATENT ASSIGNEE(S): Merck and Co., Inc., USA; Defeo-Jones, Deborah; Jones,

Raymond E.; Oliff, Allen I.; Scolnick, Edward M.;

Garsky, Victor M.

SOURCE: PCT Int. Appl., 193 pp.

CODEN: PIXXD2

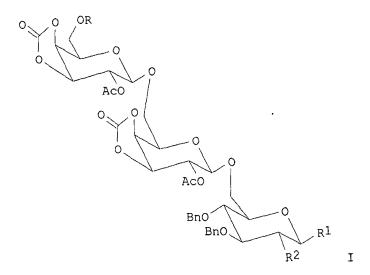
DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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WO 9714416 A1 19970424
                                           WO 1996-US16490 19961015
         W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HU,
             IL, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, UZ, VN,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,
             MR, NE, SN, TD, TG
                                            AU 1996-74321
     AU 9674321
                       Αl
                             19970507
                                                              19961015
     AU 708475
                       В2
                             19990805
     EP 855910
                            19980805
                                            EP 1996-936504
                                                            19961015
                       Α1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
     JP 2000506494
                       T2
                             20000530
                                            JP 1997-515930
                                                              19961015
     US 6177404
                                            US 1998-51759
                       В1
                             20010123
                                                              19980803
PRIORITY APPLN. INFO.:
                                         US 1995-5664P P 19951018
                                         GB 1996-2903
                                                         A 19960213
                                         WO 1996-US16490 W 19961015
OTHER SOURCE(S):
                         MARPAT 126:343882
     Novel pharmaceutical compns. useful for the treatment of benign prostatic
     hyperplasia which comprises novel oligopeptides, which are selectively
     cleaved by enzymically active prostate specific antigen (PSA), in
     conjunction with a cytotoxic agent are described. Methods of treating
     benign prostate hypertrophy are also disclosed. Thus, doxorubicin (Dox)
     conjugate Ac-Lys-Tyr-Gln-Ser-Ser-Leu-Dox was prepared and assayed for
     recognition by free PSA (98% cleavage after 4 h).
ΤT
     189513-02-8DP, resin-bound 189513-07-3DP, resin-bound
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of peptide conjugates for treatment of benign
        prostatic hyperplasia)
L17 ANSWER 22 OF 34 HCAPLUS COPYRIGHT 2002 ACS
                         1997:132768 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         126:144551
TITLE:
                         Synthesis of asparagine-linked glycopeptides on a
                         polymeric solid support
INVENTOR(S):
                         Danishefsky, Samuel J.; Roberge, Jacues; Beebe, Xenia
PATENT ASSIGNEE(S):
                         Sloan-Kettering Institute for Cancer Research, USA
                         PCT Int. Appl., 163 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO.
                     KIND DATE
                                           APPLICATION NO. DATE
                     ____
                            19961219
                                           WO 1996-US10229 19960607
    WO 9640198
                     A1
         W: AU, CA, JP, MX
         RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     US 5679769
                            19971021
                                           US 1995-477776 19950607
                      A
     AU 9661748
                       A1
                            19961230
                                            AU 1996-61748
                                                              19960607
PRIORITY APPLN. INFO.:
                                         US 1995-477776 A 19950607
                                         US 1994-213053
                                                         A2 19940315
                                         US 1995-430355
                                                          A2 19950428
                                         WO 1996-US10229 W 19960607
GΙ
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As Paragine-linked glycopeptides were prepared by halosulfonamidating a glycal, followed by azidation, acylation, reduction, peptide coupling, and deprotection steps. The glycopeptides are useful as vaccines for inducing antibodies to human breast cancer cells in adjuvant therapy. Thus, glycal I (R = polymer support, R1R2 = bond) and 9-anthracenesulfonamide suspended in THF were treated with iodonium bis(sym-collidine) perchlorate to give I (R = polymer support, R1 = 9-anthracenesulfonamide, R2 = iodo), which was treated sequentially with tetrabutylammonium azide in THF, Ac2O/4-(dimethylamino)pyridine in THF, and 1,3-propanedithiol/diisopropylethylamine in DMF to afford I (polymer support, R = NH2, R1 = NHAc). The latter underwent peptide coupling at the NH2 group to afford asparagine-linked glycopeptides.

IT 167414-32-6DP, polymer-bound

RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis of asparagine-linked glycopeptides on polymeric
 solid support)

IT 167414-32-6P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (synthesis of asparagine-linked glycopeptides on polymeric solid support)

L17 ANSWER 23 OF 34 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1995:730376 HCAPLUS

DOCUMENT NUMBER: 123:340896

TITLE: Use of glycolamidic ester link (G.E.L.) for the

preparation of protected peptides

AUTHOR(S): Ceccato, Marie-Line; Chavanieu, Alain; Chenu, Jacques;

Mendre, Christiane; Calas, Bernard

CORPORATE SOURCE: Sanofi-Recherche, Toulouse, F-31036, Fr.

SOURCE: Protein and Peptide Letters (1995), 2(1), 287-90

CODEN: PPELEN; ISSN: 0929-8665

PUBLISHER: Bentham Science Publishers BV

DOCUMENT TYPE: Journal LANGUAGE: English

AB The glycolamidic ester link was used to synthesize protected peptides having a -CO2H or -CONHNH2 group in the C-terminal position, depending on the method (NaOH or hydrazine in DMF) used to cleave the peptide from the resin.

IT 170645-96-2P 170645-97-3P 170645-99-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(glycolamidic ester link for preparation of protected peptides)

L17 ANSWER 24 OF 34 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1995:729167 HCAPLUS

DOCUMENT NUMBER: 123:103526

TITLE: Amino acid substituted analogs of atrial natriuretic

peptides that retains their activity and with

specificity for the A receptor

INVENTOR(S): Lowe, David; Cunningham, Brian C.; Oare, David;

McDowell, Robert S.; Burnier, John

PATENT ASSIGNEE(S): Genentech, Inc., USA SOURCE: PCT Int. Appl., 70 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	TENT NO.		KIND	DATE		APPLICATION NO.	DATE	
	WO	9513296		A1	19950518		WO 1994-US12591	19941104	
					, JP, NZ,			MC NI DM	CE
	C N	RW: AT, 2174517	BE,	CH, DE AA	, DK, ES, 19950518		GB, GR, IE, IT, LU CA 1994-2174517		, 55
		9519349			19950529		AU 1995-19349		
		728147			19960828				
					, DK, ES,	FR,	GB, GR, IE, IT, LI		, PT, SE
		09505049		Т2	19970520		JP 1994-513878	19941104	
	US	5665704		Α	19970909		US 1995-451240	19950525	
	US	5846932		Α	19981208		US 1995-470846	19950606	
PR	IORITY	Y APPLN.	INFO.	:			US 1993-152994	19931112	
							WO 1994-US12591	19941104	
					•		US 1995-362552	19950106	
							US 1995-419877	19950411	

AB Amino acid substituted human receptor selective atrial natriuretic factor variants, especially G16R, show equal potency and binding affinity for the human

A-receptor but have decreased affinity for the human clearance or C-receptor. These ANF variants have natriuretic, diuretic and vasorelaxant activity but have increased metabolic stability, making them suitable for treating congestive heart failure, acute kidney failure and renal hypertension.

IT 166098-79-9DP, conjugates with PAM resin

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(atriopeptin analog, amino acid sequence; amino acid substituted analogs of atrial natriuretic peptides that retains their activity and with specificity for receptor)

L17 ANSWER 25 OF 34 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1995:692091 HCAPLUS

DOCUMENT NUMBER: 123:170158

TITLE: A strategy for a convergent synthesis of N-linked .

glycopeptides on a solid support

AUTHOR(S): Roberge, Jacques Y.; Beebe, Xenia; Danishefsky, Samuel

٠Τ.

CORPORATE SOURCE: Lab. Bioorg. Chem., Sloan-Kettering Inst. Cancer Res.,

New York, NY, 10021, USA

SOURCE: Science (Washington, D. C.) (1995), 269(5221), 202-4

CODEN: SCIEAS; ISSN: 0036-8075

PUBLISHER: American Association for the Advancement of Science

DOCUMENT TYPE: Journal LANGUAGE: English

AB Oligosaccharides and glycopeptides are of considerable importance in mol. biol. and pharmacol. However, their synthesis is complicated by the large number of different linking sites between each saccharide unit, the need for stereochem. control, the chem. sensitivity of the glycopeptide bonds, and the need to harmonize diverse protecting groups. Here, an efficient solid-phase synthesis of three N-linked glycopeptides based on glycal assembly is presented. The peptide domain can be extended while the ensemble remains bound to the polymer. The glycopeptides synthesized here are among the largest N-linked glycopeptides ever accessed by either solution- or solid-phase synthesis.

IT 167414-32-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (a strategy for a convergent synthesis of N-linked glycopeptides on a solid support)

L17 ANSWER 26 OF 34 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1995:371262 HCAPLUS

DOCUMENT NUMBER: 122:214517

TITLE: Synthesis and applications of a new base-labile

fluorene derived linker for solid-phase peptide

synthesis

AUTHOR(S): Rabanal, Francesc; Giralt, Ernest; Albericio, Fernando

CORPORATE SOURCE: Dep. Organic Chem., Univ. Barcelona, Barcelona,

E-08028, Spain

SOURCE: Tetrahedron (1995), 51(5), 1449-58

CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER: Elsevier DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 122:214517

GΙ

NHCOCH2CH2CO2H

The handle N-[(9-hydroxymethyl)-2-fluorenyl]succinamic acid (HMFS) (I) is reported for the preparation of protected peptide segments in combination with a tert-butoxycarbonyl (Boc)/benzyl protection scheme. Treatment of peptide resins with morpholine in DMF renders protected peptides in high yields and purities.

IT 141340-59-2P

RL: SPN (Synthetic preparation); PREP (Preparation) (synthesis and applications of a new base-labile fluorene derived linker for solid-phase peptide synthesis)

L17 ANSWER 27 OF 34 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1995:225902 HCAPLUS

DOCUMENT NUMBER: 122:133796

TITLE: Synthesis of new fragments of VP1 protein of the A22

foot-and-mouth disease virus: fragments 134-139,

134-145, 140-145, 150-155, 150-159

AUTHOR(S): Khalikov, Sh. Kh.; Alieva, S. V.; Ashurov, S. G.

CORPORATE SOURCE: Tadzhik State Univ., Dushanbe, Tajikistan

Ţ

SOURCE: Bioorganicheskaya Khimiya (1994), 20(4), 393-405

CODEN: BIKHD7; ISSN: 0132-3423

PUBLISHER: MAIK Nauka

DOCUMENT TYPE: Journal LANGUAGE: Russian

AB Fragments 134-145 (H-Gly-Lys-Tyr-Ser-Ala-Gly-Gly-Leu-Gly-Arg-Arg-Gly-OH) and 150-159 (H-Leu-Ala-Ala-Arg-Val-Ala-Lys-Gln-Leu-Pro-OH) of the antigenic region of the VP1 protein of the A22 foot-and-mouth disease virus were synthesized by classical methods of peptide chem. with iso-Bu chloroformate as coupling reagent. After purification by HPLC and amino acid anal., the free peptides were conjugated with BSA by N,N-dicyclohexylcarbodiimide. The conjugates were used, with complete Freund adjuvant, for immunization of guinea pigs. The antibodies formed had virus neutralization activity.

IT 118884-08-5P 118884-10-9P 161007-35-8P 161007-38-1P 161007-47-2P 161007-48-3P 161007-51-8P 161007-52-9P 161007-59-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of fragments of protein of foot-and-mouth disease virus and of their conjugates for immunization)

L17 ANSWER 28 OF 34 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1994:483955 HCAPLUS

DOCUMENT NUMBER: 121:83955

TITLE: A novel Fmoc-based anchorage for the synthesis of

protected peptide on solid phase

AUTHOR(S): Lin, Wei; Chen, Lan; Liu, Yin-zeng; Niu, Ching-I CORPORATE SOURCE: Shanghai Inst. Biochem., Chin. Acad. Sci., Shanghai,

Peop. Rep. China

SOURCE: Pept.: Biol. Chem., Proc. Chin. Pept. Symp. (1993),

Meeting Date 1992, 299-300. Editor(s): Du, Yu-cang; Tam, James P.; Zhang, You-shang. ESCOM: Leiden, Neth.

CODEN: 59YOAI

DOCUMENT TYPE: Conference LANGUAGE: English

GΙ

AB A report from a symposium on the preparation of 9-fluorenylmethoxycarbonyl (Fmoc)-based 9-(hydroxymethyl)-2-fluorenebutyric acid (I) as a linker for solid-phase peptide synthesis. I was used in the solid-phase preparation of protected rat TGF- α fragment Boc-Val-Val-Ser(CH2Ph)-His(Tos)-Phe-Asn-Lys(CO2CH2C6H4Cl-2)-OH (Boc = Me3CO2C, Tos = tosyl) using Boc chem.

IT 156251-67-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of via solid-phase methods, (hydroxymethyl)fluo

(preparation of, via solid-phase methods, (hydroxymethyl) fluorenebutyric acid linker in)

L17 ANSWER 29 OF 34 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1994:55012 HCAPLUS

DOCUMENT NUMBER: 120:55012

TITLE: Preparation of peptide with cell adhesion activity and

polymeric modification thereof

INVENTOR(S): Azuma, Ichiro; Saiki, Ikuo; Kusunose, Naoto; Ikeda,

Yoshiharu; Ono, Keiichi

PATENT ASSIGNEE(S): Sumitomo Pharmaceuticals Co., Ltd., Japan

SOURCE:

PCT Int. Appl., 35 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

. 1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
WO 9312140 A1 19930624 WO 1992-JP1594 19921207

W: CA, US

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

JP 05170796 A2 19930709 JP 1991-355319 19911219

JP 3235855 B2 20011204

PRIORITY APPLN. INFO.: JP 1991-355319 A 19911219

OTHER SOURCE(S): MARPAT 120:55012

GΙ

$$Q = \frac{R^{1}(OCH_{2}CH_{2})_{p}O}{R^{2}(OCH_{2}CH_{2})_{q}O} - (CH_{2})_{t}(CO) - \frac{1}{2}(CH_{2}CH_{2})_{q}O$$

AB R-(Arg-Gly-Asp-Thr)n-OH [I; $n \approx 5-20$; R = H, polyethylene glycol Q or R3(OCH2CH2)kO(CO)(CH2)u(CO); wherein R1, R2, R3 = lower alkyl; k, p, q = any pos. integer to make the average-mol.-weight of the polyethylene glycol portion .apprx.1,000 to .apprx.12,000; t, u = 0, any pos. integer], useful as cancer metastasis, blood platelet aggregation, and bone absorption inhibitors, are prepared Thus, condensation of Boc-Arg(Tos)-Gly-[Asp(OcHex)-Thr(Bzl)-Arg(Tos)-Gly]4-OH (Tos = p-MeC6H4SO2, cHex = cyclohexyl, Bzl = CH2Ph) (preparation given) with H-[Asp(OcHex)-Thr(Bz1)-Arg(Tos)-Gly]6-Asp(OcHex)-Thr(Bzl)-OBzl (preparation given) in the presence of 1-ethyl-2-(3-diethylaminopropyl)carbodiimide hydrochloride and 1-hydroxybenzotriazole in DMF and N-methylpyrrolidinone at 5-10 $^{\circ}$ followed by deprotection with HF in anisole and MeSSEt and purification using reversed phase HPLC gave I (n = 11, R = H) (II). N-acylation of II with hydrocinnamic acid derivative Q1-OSu (Su = N-succinimidyl) (average-mol.~weight .apprx.10,000) in 0.1M borate buffer at room temperature gave, after purification

using reversed phase HPLC, a II-polyethylene glycol conjugate I (n = 11, R = Q1) (III). II at 500 μg and III at 40-1,000 μg inhibited the metastasis of B16-BL6 melanoma cells to lungs in mice. Also prepared were I (n = 1,3,5,7,9) and 5 polyethylene glycol conjugates .

IT 152016-42-7 152016-43-8

RL: RCT (Reactant); RACT (Reactant or reagent) (peptide coupling of, in preparation of peptides and their conjugates with polyethylene glycols with cell adhesion activity)

L17 ANSWER 30 OF 34 HCAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1993:250338 HCAPLUS DOCUMENT NUMBER: 118:250338

Synthesis and structure-activity relationships of TITLE: elafin, an elastase-specific inhibitor Tsunemi, Masahiko; Kato, Hisao; Nishiuchi, Yuji; AUTHOR(S): Kumagaye, Shinichiro; Sakakibara, Shumpei Prot. Res. Found., Peptide Inst. Inc., Minoh, 562, CORPORATE SOURCE: Japan Biochemical and Biophysical Research Communications SOURCE: (1992), 185(3), 967-73 CODEN: BBRCA9; ISSN: 0006-291X DOCUMENT TYPE: Journal LANGUAGE: English Elafin, an elastase-specific inhibitor isolated from human skin, and its related peptides were synthesized by the solution procedure, and their inhibitory activities were measured against various enzymes. During the oxidative folding reactions of the reduced peptides, the ratio of the active product to the inactive product was varied by changing the concentration of guanidine-HCl and the amount of redox reagents. The disulfide structures of fully active synthetic elafin and the inactive product were determined by amino acid anal., gas-phase sequencing, and mass spectrometry of their proteolytic fragments. The relation between structure and inhibitory activities and/or the folding reaction was examined and the N-terminal part of the elafin mol. was found to have a great influence on the folding reactions, but not on the inhibitory activities. 142063-35-2 142063-39-6 142063-40-9 RL: RCT (Reactant); RACT (Reactant or reagent) (coupling of, with other peptides) 9004-06-2, Elastase IT RL: PROC (Process) (inhibition of, of human leukocytes and pig pancreas, by natural and synthetic elafin and analogs, kinetics of) 144909-44-4P 144922-26-9P 144922-28-1P ITRL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and coupling of, with other peptides) L17 ANSWER 31 OF 34 HCAPLUS COPYRIGHT 2002 ACS 1992:449249 HCAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 117:49249 Synthesis of elafin, an elastase-specific inhibitor: TITLE: relationship between inhibitory activity and disulfide structure Tsunemi, Masahiko; Kato, Hisao; Nishiuchi, Yuji; AUTHOR(S): Kumagaye, Shinichiro; Sakakibara, Shumpei Prot. Res. Found., Peptide Inst. Inc., Minoh, 562, CORPORATE SOURCE: Japan Peptide Chemistry (1992), Volume Date 1991, 29th, 43-8 SOURCE: CODEN: PECHDP; ISSN: 0388-3698 DOCUMENT TYPE: Journal LANGUAGE: English A symposium report on the total synthesis of elafin, a 57-residue peptide having 8 cysteine residues, by fragment condensations in solution The starting fragments for the above synthesis were Z-Ala-Gln-Glu(OcHex)-Pro-Val-Lys(2C1)-Gly-OPac (Z = PhCH2O2C, cHex = cyclohexyl, Pac = phenacyl) (sequence 1-7), Boc-Pro-Val-Ser(Bzl)-Thr(Bzl)-Lys(ZCl)-Pro-Gly-OPac (Boc = Me3CO2C, Bzl = benzyl) (sequence 8-14), Boc-Ser(Bzl)-Cys(Acm)-Pro-Ile-Ile-Leu-OPac (Acm = acetamidomethyl) (sequence (15-20), Boc-Ile-Arg(Tos)-Cys(Acm)-Ala-Met-Leu-OPac (Tos = tosyl) (sequence 21-26),

Boc-Asn-Pro-Pro-Asn-Arg(Tos)-Cys(Acm)-Leu-OPac (sequence 27-33), Boc-Lys(ZCl)-Asp(OcHex)-Thr(Bzl)-Asp(OcHex)-Cys(Acm)-Pro-Gly-OPac

Phe-Val-Pro-Gln-OBzl (sequence 51-57). The relationship between elastase-inhibiting activity and disulfide structure of elafin is

(sequence 34-40), Boc-Ile-Lys(ZCl)-Lys(ZCl)-Cys(Acm)-Cys(Acm)-Glu(OcHex)-Gly-Ser(Bzl)-Cys(Acm)-Gly-OPac (sequence 41-50) and Boc-Met-Ala-Cys(Acm)-

discussed. TT 142063-35-2 142063-39-6 142063-40-9 RL: RCT (Reactant); RACT (Reactant or reagent) (as starting material for total synthesis of elafin via fragment condensations in solution) 9004-06-2, Elastase RL: PROC (Process) (inhibition of, by elafin) L17 ANSWER 32 OF 34 HCAPLUS COPYRIGHT 2002 ACS 1992:152400 HCAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 116:152400 Preparation of functionalized polystyrene-grafted TITLE: supports for bioassays and peptide synthesis INVENTOR(S): Berg, Rolf H.; Almdal, Kristoffer; Pedersen, Walther Batsberg; Holm, Arne PATENT ASSIGNEE(S): Forskningscenter Risoe, Den. PCT Int. Appl., 91 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE _____ ----_____ _____ WO 9113098 A1 19910905 WO 1991-DK62 19910304 W: AU, BR, CA, FI, HU, JP, KR, NO, PL, RO, SU, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE AU 1991-74544 19910304 AU 9174544 A1 19910918 PRIORITY APPLN. INFO,: DK 1990-559 19900302 WO 1991-DK62 19910304 Polymers grafted with functionalized polystyrene chains of mol. weight >200,000 capable of covalent linking with amino acids, peptides, or proteins were prepared Thus, low-d. polyethylene sheet and purified styrene in an ampoule were irradiated with γ -rays from a cobalt source at .apprx.400 Gy/h for 0.95-5.6 h to give 55-547% grafted material. Rectangular strips (1.5 + 4.5 cm) of 443% polystyrene-grafted polyethylene were aminomethylated by treatment with N-(hydroxymethyl)phthalimide in CH2Cl2/F3CCO2H/F3CSO3H followed by hydrazinolysis to give material having 1.00 mmol NH2/g. The aminomethylated material was used for preparation of, e.g., melittin-(7-21) and analogs using Me3CO2C-protected amino acids and double DCC coupling, and in preparation of "immunosticks" for Elisa detection of angiotensin II. 139644-88-5DP, aminomethylated polystyrene-grafted polyethylene bound 139663-60-8DP, aminomethylated polystyrene-grafted polyethylene bound RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and resin cleavage reaction of) 9002-88-4D, Polyethylene, functionalized, polystyrene-grafted ΙT RL: RCT (Reactant); RACT (Reactant or reagent) (support, for bioassays and peptide synthesis) L17 ANSWER 33 OF 34 HCAPLUS COPYRIGHT 2002 ACS 1988:146058 HCAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 108:146058

AUTHOR(S): Ando, Shoji; Yasutake, Akira; Waki, Michinori; Nishino, Norikazu; Kato, Tetsuo; Izumiya, Nobuo

inhibitor

TITLE:

Anti-chymotrypsin and anti-elastase activities of a

chymotrypsin-reactive site of soybean Bowman-Birk

synthetic bicyclic fragment containing a

Fac. Sci., Kyushu Univ., Fukuoka, 812, Japan CORPORATE SOURCE: Biochimica et Biophysica Acta (1987), 916(3), 527-31 SOURCE: CODEN: BBACAQ; ISSN: 0006-3002 DOCUMENT TYPE: Journal. English LANGUAGE: A bicyclic hexadecapeptide, which corresponds to the sequence 36-51 and contains the chymotrypsin-reactive Leu-43-Ser-44 bond of soybean Bowman-Birk inhibitor, was synthesized. This peptide consists of 2 loops formed by SS bridges between cysteine (Cys)-36 and Cys-51 and between Cys-41 and Cys-49. The bicyclic peptide showed a strong anti-chymotryptic activity with a Ki = 7.1 + 10-7M. Comparison of inhibitory activity and digestive stability against chymotrypsin with other hexadecapeptides having the same sequence but lacking 1 or both SS bridges suggested that the compact bicyclic structure increases the activity and protects the Leu-Ser bond from chymotryptic digestion. Interestingly, the bicyclic peptide was found to inhibit porcine pancreatic elastase with a Ki = 4.3+ 10-5M, indicating the broad specificity of this ring system. 9004-06-2, Elastase ΙT RL: PROC (Process) (inhibition of, by Bowman-Birk inhibitor analog, kinetics of) ΙT 113739~34-7P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and deprotection and cyclization of) TΤ 113739-32-5P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and reaction with peptide derivative) 113739-30-3P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of and reaction with peptide derivative) IΤ 113739-28-9 RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with peptide derivative) L17 ANSWER 34 OF 34 HCAPLUS COPYRIGHT 2002 ACS 1987:513867 HCAPLUS ACCESSION NUMBER: 107:113867 DOCUMENT NUMBER: TITLE: Synthesis of conjugates between luteinizing hormone releasing hormone (LH-RH) and N-acetyl-muramyl-Lalanyl-D-isoglutamine (MDP) models of totally synthetic vaccines Bernard, J. M.; Gras-Masse, H.; Drobecq, H.; Tartar, AUTHOR(S): A.; Lefrancier, P.; Hosmalin, A.; Carelli, C.; Chedid, CORPORATE SOURCE: Choay Inst., Montrouge, F-92120, Fr. International Journal of Peptide & Protein Research SOURCE: (1987), 29(4), 455-63 CODEN: IJPPC3; ISSN: 0367-8377 DOCUMENT TYPE: Journal LANGUAGE: English CASREACT 107:113867 OTHER SOURCE(S): Two glycopeptides associating the amino acid sequence of LH-RH with MDP were prepared, using a Lys residue as a linker. These conjugates, $N\alpha$ -MDP-N ϵ -(LH-RH)-Lys and $N\alpha$ -MDP-N ϵ -(LH-RH)-Lys-NH2, obtained by condensation of fragments were synthesized by liquidas well as solid-phase methods. Both compds. were able to induce anti LH-RH antibodies and immunol.-induced castration. They retained the immune adjuvant activity of MDP. Such antigen-adjuvant constructs, devoid of carrier and obtained by chem. defined and reproducible synthetic methods, could offer suitable tools for structure-activity relationship studies aiming at defining synthetic vaccines.

TΤ

99087-75-9P

RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and coupling of, with muramyl dipeptide-peptide
 conjugate)

=> sel hit rn E1 THROUGH E81 ASSIGNED

=> file reg FILE 'REGISTRY' ENTERED AT 10:34:24 ON 12 DEC 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2002 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 11 DEC 2002 HIGHEST RN 475975-25-8 DICTIONARY FILE UPDATES: 11 DEC 2002 HIGHEST RN 475975-25-8

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(FILE 'HCAPLUS' ENTERED AT 10:33:44 ON 12 DEC 2002) SEL HIT RN

FILE 'REGISTRY' ENTERED AT 10:34:24 ON 12 DEC 2002 L18 74 S E1-E81 AND L3

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                113739-30-3
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73
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                113739-28-9
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74
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                 99087-75-9
                              REGISTRY
=> d ide can 118 1 5 10 15 20 25 30 35 40 45 50 55 60 65 70 74
     ANSWER 1 OF 74 REGISTRY COPYRIGHT 2002 ACS
L18
RN
     408502-26-1 REGISTRY
CN
     L-Leucine, (4R)-1-acetyl-4-(phenylmethoxy)-L-prolyl-L-alanyl-0-
     (phenylmethyl)-L-seryl-2-cyclohexylglycyl-L-glutaminyl-O-(phenylmethyl)-L-
     seryl- (9CI) (CA INDEX NAME)
FS
     PROTEIN SEQUENCE; STEREOSEARCH
MF
     C56 H76 N8 O13
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SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

2 REFERENCES IN FILE CA (1962 TO DATE)

2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

3 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 136:310188

REFERENCE 2: 136:310187

L18 ANSWER 5 OF 74 REGISTRY COPYRIGHT 2002 ACS

RN **360781-12-0** REGISTRY

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C65 H81 N7 O19

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

PAGE 1-A

PAGE 1-B

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 135:273218

L18 ANSWER 10 OF 74 REGISTRY COPYRIGHT 2002 ACS

RN 271794-98-0 REGISTRY

CN Glycine, O-benzoyl-N-[(1,1-dimethylethoxy)carbonyl]-L-seryl-L-isoleucyl-L- α -aspartyl-N5-[imino[((4-methylphenyl)sulfonyl]amino]methyl]-L- ornithyl-L-isoleucyl-N5-[imino[((4-methylphenyl)sulfonyl)amino]methyl)-L- ornithyl-L-alanyl-L-glutaminyl-O-benzoyl-L-serylglycyl-L-leucyl-, 3-methyl ester (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C86 H123 N19 O26 S2

SR CA

LC STN Files: CA, CAPLUS

PAGE 1-B

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 133:17802

L18 ANSWER 15 OF 74 REGISTRY COPYRIGHT 2002 ACS
RN 249589-49-9 REGISTRY
CN L-Glutamic acid, N-[(1,1-dimethylethoxy)carbonyl]-L-alanyl-O(phenylmethyl)-L-serylglycyl-, 45-(phenylmethyl) 41-(2-propenyl) ester
(9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH

MF C35 H46 N4 O10

SR CA

LC STN Files: CA, CAPLUS

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 131:322896

L18 ANSWER 20 OF 74 REGISTRY COPYRIGHT 2002 ACS

RN 246849-57-0 REGISTRY

CN L-Aspartic acid, S-[(acetylamino)methyl]-N-[(1,1-dimethylethoxy)carbonyl]-L-cysteinyl-S-[(4-methoxyphenyl)methyl]-L-cysteinyl-L-phenylalanyl-N5-[imino[((4-methylphenyl)sulfonyl]amino]methyl]-L-ornithyl-O-(phenylmethyl)-L-seryl-S-[(4-methoxyphenyl)methyl]-L-cysteinyl-, bis(phenylmethyl) ester (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C83 H101 N11 O18 S4

SR CA

LC STN Files: CA, CAPLUS

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry. Rotation (-).

PAGE 1-A

PAGE 1-B

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 131:286798

L18 ANSWER 25 OF 74 REGISTRY COPYRIGHT 2002 ACS

RN **246849-52-5** REGISTRY

CN L-Aspartic acid, N5-[imino[[(4-methylphenyl)sulfonyl]amino]methyl]-L-ornithyl-O-(phenylmethyl)-L-seryl-S-[(4-methoxyphenyl)methyl]-L-cysteinyl-, bis(phenylmethyl) ester (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C52 H61 N7 O11 S2

SR CA

LC STN Files: CA, CAPLUS

RELATED SEQUENCES AVAILABLE WITH SEQLINK

PAGE 1-B

1 REFERENCES IN FILE CA (1962 TO DATE)

1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 131:286798

L18 ANSWER 30 OF 74 REGISTRY COPYRIGHT 2002 ACS

RN 220871-28-3 REGISTRY

CN L-Lysine, (4S,5R)-2,2,3-trimethyl-5-(1-methylethyl)-4-oxazolidinecarbonyl-(2S)-2-aminobutanoyl-N-methyl-O-(phenylmethyl)-D-seryl-N-methyl-L-leucyl-L-valyl-N-methyl-L-leucyl-N6-[[(2-chlorophenyl)methoxy]carbonyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C65 H97 C1 N8 O12

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry. Rotation (-).

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PAGE 1-B

PAGE 1-A

2 REFERENCES IN FILE CA (1962 TO DATE)

2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 130:209984

REFERENCE 2: 130:209983

L18 ANSWER 35 OF 74 REGISTRY COPYRIGHT 2002 ACS

RN **207395-91-3** REGISTRY

CN L-Leucine, (4R)-1-[(9H-fluoren-9-ylmethoxy)carbonyl]-4-(phenylmethoxy)-L-prolyl-L-alanyl-O-(phenylmethyl)-L-seryl-(2S)-2-cyclohexylglycyl-L-qlutaminyl-O-(phenylmethyl)-L-seryl-(9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C69 H84 N8 O14

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

PAGE 1-B

- 1 REFERENCES IN FILE CA (1962 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 129:4866

L18 ANSWER 40 OF 74 REGISTRY COPYRIGHT 2002 ACS

RN 201530-30-5 REGISTRY

CN Glycine, L-leucyl-O-(phenylmethyl)-L-seryl-O-(phenylmethyl)-L-threonyl-S[(acetylamino)methyl]-L-cysteinyl-L-valyl-L-leucylthio-,
S-[3-[[(1S)-1-(aminocarbonyl)pentyl]amino]-3-oxopropyl] ester (9CI) (CA
INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C55 H86 N10 O12 S2

SR CA

LC STN Files: CA, CAPLUS

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

PAGE 1-B

2 REFERENCES IN FILE CA (1962 TO DATE)

2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 130:153953

REFERENCE 2: 128:115219

L18 ANSWER 45 OF 74 REGISTRY COPYRIGHT 2002 ACS

RN 170645-97-3 REGISTRY

CN L-Tyrosine, N-[N-[N-[N-[N-[N-[(1,1-dimethylethoxy)carbonyl]-L-isoleucyl]- (1,1-dimethylethoxy) carbonyl]-L-isoleucyl]-

L-phenylalanyl]-O-(phenylmethyl)-L-threonyl]-L-asparaginyl]-O-(phenylmethyl)-L-seryl]-O-(phenylmethyl)-, hydrazide (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C61 H77 N9 O12

SR CA

LC STN Files: CA, CAPLUS

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

PAGE 1-B

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1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 123:340896

L18 ANSWER 50 OF 74 REGISTRY COPYRIGHT 2002 ACS

RN 161007-52-9 REGISTRY

CN Glycine, N-[N2-[N-[N-[N-[N-[N-[N-[N-[N-[N2-glycyl-N6-[(phenylmethoxy)carbonyl]-L-lysyl]-O-(phenylmethyl)-L-tyrosyl]-O-(phenylmethyl)-L-seryl]-L-alanyl]glycyl]glycyl]-L-leucyl]glycyl]-N5-[imino(nitroamino)methyl]-L-ornithyl]-N5-[imino(nitroamino)methyl]-L-ornithyl]-, monohydrochloride (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C71 H99 N21 O21 . C1 H

SR CA

LC STN Files: CA, CAPLUS

RELATED SEQUENCES AVAILABLE WITH SEQLINK

PAGE 1-A

PAGE 1-B

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 122:133796

L18 ANSWER 55 OF 74 REGISTRY COPYRIGHT 2002 ACS

RN **161007-35-8** REGISTRY

CN Glycine, N-[N-[N-[N-[N2-[N-[(1,1-dimethylethoxy)carbonyl]glycyl]-N6-[(phenylmethoxy)carbonyl]-L-lysyl]-O-(phenylmethyl)-L-tyrosyl]-O-(phenylmethyl)-L-seryl]-L-alanyl]-, methyl ester (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C53 H67 N7 O13

SR CA

LC STN Files: CA, CAPLUS

RELATED SEQUENCES AVAILABLE WITH SEQLINK

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 122:133796

L18 ANSWER 60 OF 74 REGISTRY COPYRIGHT 2002 ACS

RN 144922-26-9 REGISTRY

CN Glycine, N-[(phenylmethoxy)carbonyl]-L-alanyl-L-glutaminyl-L-αglutamyl-L-prolyl-L-valyl-N6-[[(2-chlorophenyl)methoxy]carbonyl]-Llysylglycyl-L-prolyl-L-valyl-O-(phenylmethyl)-L-seryl-O-(phenylmethyl)-Lthreonyl-N6-[[(2-chlorophenyl)methoxy]carbonyl]-L-lysyl-L-prolyl-,
3-cyclohexyl 14-(2-oxo-2-phenylethyl) ester (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C113 H147 C12 N17 O27

SR CF

LC STN Files: CA, CAPLUS

PAGE 1-B

PAGE 1-C



- 1 REFERENCES IN FILE CA (1962 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

1: 118:250338 REFERENCE

ANSWER 65 OF 74 REGISTRY COPYRIGHT 2002 ACS 141340-59-2 REGISTRY

RN

CN [(1,1-dimethylethoxy)carbonyl]-L- α -aspartyl]-L- α -aspartyl]-O- $(phenylmethyl)-L-threonyl]-L-methionyl]-L-lysyl]-L-\alpha-aspartyl]-L$ alanyl]-, 4,4',4''-tricyclohexyl ester (9CI) (CA INDEX NAME)

PROTEIN SEQUENCE; STEREOSEARCH FS

MF C70 H102 C1 N9 O20 S

SR CA

STN Files: CA, CAPLUS LC

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

PAGE 1-B

2 REFERENCES IN FILE CA (1962 TO DATE) 2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 122:214517

REFERENCE 2: 116:236110

ANSWER 70 OF 74 REGISTRY COPYRIGHT 2002 ACS 113739-34-7 REGISTRY

RN

 $L-Cystein a mide, \ N-acetyl-S-\{(4-methoxyphenyl) methyl\}-L-cystein yl-N6-methyl-M6-$ CN [(phenylmethoxy)carbonyl]-L-lysyl-O-(phenylmethyl)-L-seryl-L-alanyl-Lisoleucyl-S-[(acetylamino)methyl]-L-cysteinyl-L-alanyl-L-leucyl-L-seryl-Ltyrosyl-L-prolyl-L-alanyl-L-glutaminyl-S-[(acetylamino)methyl]-L-cysteinyl-L-phenylalanyl-S-[(4-methoxyphenyl)methyl]- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C112 H155 N21 O27 S4

\$R CA

.CA, CAPLUS STN Files:

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

PAGE 1-A

PAGE 1-C

2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 110:24288

REFERENCE 2: 108:146058

L18 ANSWER 74 OF 74 REGISTRY COPYRIGHT 2002 ACS

RN 99087-75-9 REGISTRY

CN Glycine, N-[N-[N-[N-[N-(5-oxo-L-prolyl)-1-[(phenylmethoxy)methyl]-L-histidyl]-L-tryptophyl]-O-(phenylmethyl)-L-seryl]-O-(phenylmethyl)-L-tyrosyl]- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C58 H61 N9 011

SR CA

LC STN Files: CA, CAPLUS

RELATED SEQUENCES AVAILABLE WITH SEQLINK

2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 107:113867

REFERENCE 2: 104:51096